



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,009	03/10/2004	Matthew D. Garratt	01-3177 (370004-00028)	4942

8840 7590 02/23/2005

ECKERT SEAMANS CHERIN & MELLOTT, LLC
ALCOA TECHNICAL CENTER
100 TECHNICAL DRIVE
ALCOA CENTER, PA 15069-0001

EXAMINER

ZIMMERMAN, JOHN J

ART UNIT

PAPER NUMBER

1775

DATE MAILED: 02/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/798,009

Applicant(s)

GARRATT ET AL.

Examiner

John J. Zimmerman

Art Unit

1775

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) 35-37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,7-15 and 17-34 is/are rejected.
- 7) ☒ Claim(s) 3, 5-6, 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

SECOND OFFICE ACTION

Amendments

1. This Second Office Action is in response to the Amendment received December 10, 2004.

Election/Restrictions

2. Applicant elected Group I, claims 1-34, in the correspondence received July 12, 2004. The election has been treated as an election without traverse (MPEP § 818.03(a)). Claims 35-37 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention.

Double Patenting

3. The prior provisional rejection of claims 1-3 and 15-33 under 35 U.S.C. 101 as claiming the same invention as that of claims 1-3 and 15-33 of copending Application No. 10/286,937 has been withdrawn in view of the abandonment of the copending application.
4. The prior provisional rejection of claims 4-14 and 34 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 4-14 and 34 of

Art Unit: 1775

copending Application No. 10/286,937 has been withdrawn in view of the abandonment of the copending application.

Claim Rejections - 35 USC § 112

5. The prior rejection of claim 28 under 35 U.S.C. 112, second paragraph has been withdrawn in view of applicant's amendment to the claims.

Claim Rejections - 35 USC § 102/103

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Art Unit: 1775

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-2, 4, 7-15, 17-34 are rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Armanie (U.S. Patent 6,113,711).

9. Armanie discloses an extruded structural member (e.g. see Figures 1-2 and claim 7 for extruded profile with a local geometry promoting axisymmetric metal flow and ribs formed between other structural ribs; see column 1, lines 53-58, for discussion on unrecrystallized microstructure exhibiting fiber texture; see column 4, line 40 - column 5, line 15, for alloy compositions; see paragraph spanning columns 5 and 6 for inclusion of lithium and improved fracture toughness of the alloy). The axisymmetric metal flow of Armanie would promote $\langle 100 \rangle$ and $\langle 111 \rangle$ fiber components. Although Armanie may not recite "intentionally" increasing amounts of fiber texture, the process of Armanie has the same steps, compositions and configurations disclosed by applicant to result in increased amounts of fiber texture. Patent and Trademark Office can require applicants to prove that prior art products do not necessarily or inherently possess characteristics of claimed products where claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes; burden of proof is on applicants where rejection based on inherency under 35 U.S.C. § 102 or on prima facie obviousness under 35 U.S.C. § 103, jointly or alternatively, and Patent and

Art Unit: 1775

Trademark Office's inability to manufacture products or to obtain and compare prior art products evidences fairness of this rejection, *In re Best, Bolton, and Shaw*, 195 USPQ 431 (CCPA 1977).

While the reference may not teach the exact same alloy composition proportions as recited in the instant claims, the compositions of the reference clearly have points within applicants'

composition ranges and therefore anticipate the claimed compositions. In any event, one of ordinary skill in the art at the time the invention was made would have considered the invention

to have been obvious because the compositional proportions taught by the reference overlap the instantly claimed proportions and therefore are considered to establish a prima facie case of

obviousness. It would have been prima facie obvious to one of ordinary skill in the art to select any portion of the disclosed ranges including the instantly claimed ranges from the ranges

disclosed in the prior art reference, *In re Peterson* 65 USPQ2d 1379 (CAFC 2003). Also, *In re Geisler* 43 USPQ2d 1365 (Fed. Cir. 1997); *In re Woodruff*, 16 USPQ2d 1934 (CCPA 1976); *In*

re Malagari, 182 USPQ 549, 553 (CCPA 1974) and MPEP 2144.05. Regarding the issue of recrystallization, Armanie shows recognition in the art of unrecrystallized microstructures (e.g.

see column 1, lines 53-58, for discussion on unrecrystallized microstructure exhibiting fiber

texture) and only "preferably" includes further heat treatments that might affect the extruded microstructure (e.g. see column 5, lines 52-59). Regarding the process language in the article

claims (e.g. see claims 7, 8), when there is a substantially similar product, as in the applied prior art, the burden of proof is shifted to the applicant to establish that their product is patentably

distinct not the examiner to show that the same process of making, see *In re Brown*, 173 U.S.P.Q. 685, and *In re Fessmann*, 180 U.S.P.Q. 324. Regarding the specific rib shapes of claims 9-13,

these are conventional rib shapes in the stringer art and therefore they would have been

Art Unit: 1775

considered obvious variations on the rib shapes of Armanie's illustrative Figure 1 because Armanie specifically is making members for aircraft construction (e.g. see column 1, lines 10-13). Regarding claim 19, Armanie's illustrated ribs appear to meet the aspect ratio of the claim. While it is understood that the ribs of Armanie may not be drawn to exact scale, it would be understood by one of ordinary skill in the art that the ribs should be any aspect ratio that allows performance of their structural function.

10. Claims 1-2, 15, 17, 19-24, 26, 28, 30, 32-33 are rejected under 35 U.S.C. 103(a) as obvious over Sugio (Japanese publication 04-022508) in view of Armanie (U.S. Patent 6,113,711).

11. Sugio discloses an extruded structural member having a substantially unrecrystallized microstructure and fiber texture (e.g. see Figures 1-2 for the extruded profile with a local geometry of about a 1.0 aspect ratio promoting axisymmetric metal flow; see page 2 of the translation for 2000, 5000 and 7000 system alloy compositions). The axisymmetric metal flow of Sugio promotes $\langle 100 \rangle$ and $\langle 111 \rangle$ fiber components (e.g. see page 3 of the translation). Patent and Trademark Office can require applicants to prove that prior art products do not necessarily or inherently possess characteristics of claimed products where claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes; burden of proof is on applicants where rejection based on inherency under 35 U.S.C. § 102 or on prima facie obviousness under 35 U.S.C. § 103, jointly or alternatively, and Patent and Trademark Office's inability to manufacture products or to obtain and compare prior

Art Unit: 1775

art products evidences fairness of this rejection, *In re Best, Bolton, and Shaw*, 195 USPQ 431 (CCPA 1977). While the reference may not teach the exact same alloy composition proportions as recited in the instant claims, the compositions of the reference clearly have points within applicants' composition ranges and therefore anticipate the claimed compositions. In any event, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the compositional proportions taught by the reference overlap the instantly claimed proportions and therefore are considered to establish a prima facie case of obviousness. It would have been prima facie obvious to one of ordinary skill in the art to select any portion of the disclosed ranges including the instantly claimed ranges from the ranges disclosed in the prior art reference, *In re Peterson* 65 USPQ2d 1379 (CAFC 2003). Also, *In re Geisler* 43 USPQ2d 1365 (Fed. Cir. 1997); *In re Woodruff*, 16 USPQ2d 1934 (CCPA 1976); *In re Malagari*, 182 USPQ 549, 553 (CCPA 1974) and MPEP 2144.05. Although Sugio may not discuss whether the extruded profile is substantially unrecrystallized, Armanie shows that if Sugio exhibits fiber texture from axisymmetric extrusion, it would be understood by one of ordinary skill in the art to be unrecrystallized (e.g. column 1, lines 55-58, of Armanie).

12. Claims 1-2, 15, 17-18, 20-26, 28, 30, 32-33 are rejected under 35 U.S.C. 102(a) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Liu (U.S. Pub. No. 2001/00200501).

13. Liu discloses an extruded structural member having a substantially unrecrystallized microstructure and fiber texture (e.g. see Figure 4 for unrecrystallized extruded profile with a local geometry promoting axisymmetric metal flow; see paragraphs [0044]-[0048] for discussion

Art Unit: 1775

on unrecrystallized microstructure; see paragraphs [0003] and [0014]-[0016] for alloy compositions). The axisymmetric metal flow of Liu would promote $\langle 100 \rangle$ and $\langle 111 \rangle$ fiber components. Although Liu may not recite "intentionally" increasing amounts of fiber texture, the process of Liu has the same steps, compositions and configurations disclosed by applicant to result in increased amounts of fiber texture. Patent and Trademark Office can require applicants to prove that prior art products do not necessarily or inherently possess characteristics of claimed products where claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes; burden of proof is on applicants where rejection based on inherency under 35 U.S.C. § 102 or on prima facie obviousness under 35 U.S.C. § 103, jointly or alternatively, and Patent and Trademark Office's inability to manufacture products or to obtain and compare prior art products evidences fairness of this rejection, *In re Best, Bolton, and Shaw*, 195 USPQ 431 (CCPA 1977). While the reference may not teach the exact same alloy composition proportions as recited in the instant claims, the compositions of the reference clearly have points within applicants' composition ranges and therefore anticipate the claimed compositions. In any event, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the compositional proportions taught by the reference overlap the instantly claimed proportions and therefore are considered to establish a prima facie case of obviousness. It would have been prima facie obvious to one of ordinary skill in the art to select any portion of the disclosed ranges including the instantly claimed ranges from the ranges disclosed in the prior art reference, *In re Peterson* 65 USPQ2d 1379 (CAFC 2003). Also, *In re Geisler* 43 USPQ2d 1365 (Fed. Cir. 1997); *In re*

Art Unit: 1775

Woodruff, 16 USPQ2d 1934 (CCPA 1976); *In re Malagari*, 182 USPQ 549, 553 (CCPA 1974) and MPEP 2144.05.

14. Claims 1-2, 15, 17-18, 20-26, 28, 30, 32-33 are rejected under 35 U.S.C. 102(e) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Liu (U.S. Patent 6,325,869).

15. Liu discloses an extruded structural member having a substantially unrecrystallized microstructure and fiber texture (e.g. see Figure 4 for unrecrystallized extruded profile with a local geometry promoting axisymmetric metal flow; see column 7, line 24 - column 8, line 21, for discussion on unrecrystallized microstructure; see column 1, lines 25-67, and column 2, lines 35-66, for alloy compositions). The axisymmetric metal flow of Liu would promote $\langle 100 \rangle$ and $\langle 111 \rangle$ fiber components. Although Liu may not recite "intentionally" increasing amounts of fiber texture, the process of Liu has the same steps, compositions and configurations disclosed by applicant to result in increased amounts of fiber texture. Patent and Trademark Office can require applicants to prove that prior art products do not necessarily or inherently possess characteristics of claimed products where claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes; burden of proof is on applicants where rejection based on inherency under 35 U.S.C. § 102 or on prima facie obviousness under 35 U.S.C. § 103, jointly or alternatively, and Patent and Trademark Office's inability to manufacture products or to obtain and compare prior art products evidences fairness of this rejection, *In re Best, Bolton, and Shaw*, 195 USPQ 431 (CCPA 1977). While the

Art Unit: 1775

reference may not teach the exact same alloy composition proportions as recited in the instant claims, the compositions of the reference clearly have points within applicants' composition ranges and therefore anticipate the claimed compositions. In any event, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the compositional proportions taught by the reference overlap the instantly claimed proportions and therefore are considered to establish a prima facie case of obviousness. It would have been prima facie obvious to one of ordinary skill in the art to select any portion of the disclosed ranges including the instantly claimed ranges from the ranges disclosed in the prior art reference, *In re Peterson* 65 USPQ2d 1379 (CAFC 2003). Also, *In re Geisler* 43 USPQ2d 1365 (Fed. Cir. 1997); *In re Woodruff*, 16 USPQ2d 1934 (CCPA 1976); *In re Malagari*, 182 USPQ 549, 553 (CCPA 1974) and MPEP 2144.05.

16. Claims 1-2, 15, 17-18, 20-26, 28, 30, 32-33 are rejected under 35 U.S.C. 102(a) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Karabin (U.S. Patent 5,863,359).

17. Karabin discloses an extruded structural member having a substantially unrecrystallized microstructure and fiber texture (e.g. see column 5, lines 13-15 for unrecrystallized extruded stringer; see column 9, lines 20-24 for stringer profiles having a geometry promoting axisymmetric metal flow; see columns 1 and 2 for alloy compositions). The axisymmetric metal flow of the extruded stringer profiles of Karabin would promote <100> and <111> fiber components. Although Karabin may not recite "intentionally" increasing amounts of fiber

Art Unit: 1775

texture, the process of Karabin has the same steps, compositions and configurations disclosed by applicant to result in increased amounts of fiber texture. Patent and Trademark Office can require applicants to prove that prior art products do not necessarily or inherently possess characteristics of claimed products where claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes; burden of proof is on applicants where rejection based on inherency under 35 U.S.C. § 102 or on prima facie obviousness under 35 U.S.C. § 103, jointly or alternatively, and Patent and Trademark Office's inability to manufacture products or to obtain and compare prior art products evidences fairness of this rejection, *In re Best, Bolton, and Shaw*, 195 USPQ 431 (CCPA 1977). While the reference may not teach the exact same alloy composition proportions as recited in the instant claims, the compositions of the reference clearly have points within applicants' composition ranges and therefore anticipate the claimed compositions. In any event, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the compositional proportions taught by the reference overlap the instantly claimed proportions and therefore are considered to establish a prima facie case of obviousness. It would have been prima facie obvious to one of ordinary skill in the art to select any portion of the disclosed ranges including the instantly claimed ranges from the ranges disclosed in the prior art reference, *In re Peterson* 65 USPQ2d 1379 (CAFC 2003). Also, *In re Geisler* 43 USPQ2d 1365 (Fed. Cir. 1997); *In re Woodruff*, 16 USPQ2d 1934 (CCPA 1976); *In re Malagari*, 182 USPQ 549, 553 (CCPA 1974) and MPEP 2144.05.

Art Unit: 1775

18. Claims 1-2, 15, 17, 20-23, 28 and 30 are rejected under 35 U.S.C. 102(e) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Takemoto (U.S. Pub. No. 2002/0043640).

19. Takemoto discloses an extruded structural member having a substantially unrecrystallized microstructure and fiber texture (e.g. see paragraph [0042] for discussion on unrecrystallized microstructure; see paragraphs [0028]-[0035] for compositions). The extruded member of Takemoto is further machined (e.g. see paragraph [0038]). The extruded metal flow of Takemoto would promote <100> and <111> fiber components. The fiber structure of the claims would be present in Takemoto in view of the fact that Takemoto follows similar steps, compositions and configurations disclosed by applicant to result in increased amounts of fiber texture. Patent and Trademark Office can require applicants to prove that prior art products do not necessarily or inherently possess characteristics of claimed products where claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes; burden of proof is on applicants where rejection based on inherency under 35 U.S.C. § 102 or on prima facie obviousness under 35 U.S.C. § 103, jointly or alternatively, and Patent and Trademark Office's inability to manufacture products or to obtain and compare prior art products evidences fairness of this rejection, *In re Best, Bolton, and Shaw*, 195 USPQ 431 (CCPA 1977). While the reference may not teach the exact same alloy composition proportions as recited in the instant claims, the compositions of the reference clearly have points within applicants' composition ranges and therefore anticipate the claimed compositions. In any event, one of ordinary skill in the art at the time the invention was made would have considered the

Art Unit: 1775

invention to have been obvious because the compositional proportions taught by the reference overlap the instantly claimed proportions and therefore are considered to establish a prima facie case of obviousness. It would have been prima facie obvious to one of ordinary skill in the art to select any portion of the disclosed ranges including the instantly claimed ranges from the ranges disclosed in the prior art reference, *In re Peterson* 65 USPQ2d 1379 (CAFC 2003). Also, *In re Geisler* 43 USPQ2d 1365 (Fed. Cir. 1997); *In re Woodruff*, 16 USPQ2d 1934 (CCPA 1976); *In re Malagari*, 182 USPQ 549, 553 (CCPA 1974) and MPEP 2144.05.

20. Claims 1-2, 15, 17, 20-23, 28, 30 and 33 are rejected under 35 U.S.C. 102(e) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Yoshihara (U.S. Pub. No. 2002/0014287) or Kawai (U.S. Pub. No. 2003/0008165).

21. Yoshihara discloses an extruded structural member having a substantially unrecrystallized microstructure and fiber texture (e.g. see paragraph [0039] for discussion on unrecrystallized microstructure; see paragraphs [0027]-[0038] for compositions; see Figure 1 for extruded shape which would promote asymmetric metal flow). Kawai discloses an extruded structural member having a substantially unrecrystallized microstructure and fiber texture (e.g. see paragraphs [0014]-[0023] for discussion on unrecrystallized microstructure and for compositions; see Figure 1 for extruded shape which would promote asymmetric metal flow). The extruded metal flow of Yoshihara and Kawai would promote <100> and <111> fiber components. The fiber structure of the claims would be present in Takemoto and Kawai in view of the fact that these references follows similar steps, compositions and configurations disclosed

Art Unit: 1775

by applicant to result in increased amounts of fiber texture. Patent and Trademark Office can require applicants to prove that prior art products do not necessarily or inherently possess characteristics of claimed products where claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes; burden of proof is on applicants where rejection based on inherency under 35 U.S.C. § 102 or on prima facie obviousness under 35 U.S.C. § 103, jointly or alternatively, and Patent and Trademark Office's inability to manufacture products or to obtain and compare prior art products evidences fairness of this rejection, *In re Best, Bolton, and Shaw*, 195 USPQ 431 (CCPA 1977). While the references may not teach the exact same alloy composition proportions as recited in the instant claims, the compositions of the references clearly have points within applicants' composition ranges and therefore anticipate the claimed compositions. In any event, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the compositional proportions taught by the references overlap the instantly claimed proportions and therefore are considered to establish a prima facie case of obviousness. It would have been prima facie obvious to one of ordinary skill in the art to select any portion of the disclosed ranges including the instantly claimed ranges from the ranges disclosed in the prior art references, *In re Peterson* 65 USPQ2d 1379 (CAFC 2003). Also, *In re Geisler* 43 USPQ2d 1365 (Fed. Cir. 1997); *In re Woodruff*, 16 USPQ2d 1934 (CCPA 1976); *In re Malagari*, 182 USPQ 549, 553 (CCPA 1974) and MPEP 2144.05.

Art Unit: 1775

22. Claims 1-2, 15, 17, 20-24, 28, 30 and 32-33 are rejected under 35 U.S.C. 102(a,b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Yamashita (U.S. Patent 6,231,995) or Yamashita (Japanese publication 11-071624).

23. Yamashita '995 discloses an extruded structural member having a substantially unrecrystallized microstructure and fiber texture (e.g. see column 4, lines 56-60 for discussion on unrecrystallized microstructure; see column 2, line 63 - column 3, line 8, for compositions; see Figure 1 for extruded shape with ribs which would promote asymmetric metal flow). Yamashita '624 discloses an extruded structural member having a substantially unrecrystallized microstructure and fiber texture (e.g. see paragraphs [0011] for discussion on unrecrystallized microstructure; see paragraphs [0010]-[0016] for compositions; see Figure 1 for extruded shape with ribs which would promote asymmetric metal flow). The extruded metal flow of the Yamashita references would promote $\langle 100 \rangle$ and $\langle 111 \rangle$ fiber components. The fiber structure of the claims would be present in the Yamashita references in view of the fact that these references follows similar steps, compositions and configurations disclosed by applicant to result in increased amounts of fiber texture. Patent and Trademark Office can require applicants to prove that prior art products do not necessarily or inherently possess characteristics of claimed products where claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes; burden of proof is on applicants where rejection based on inherency under 35 U.S.C. § 102 or on prima facie obviousness under 35 U.S.C. § 103, jointly or alternatively, and Patent and Trademark Office's inability to manufacture products or to obtain and compare prior art products evidences fairness of this rejection, *In re Best, Bolton*,

Art Unit: 1775

and Shaw, 195 USPQ 431 (CCPA 1977). While the references may not teach the exact same alloy composition proportions as recited in the instant claims, the compositions of the references clearly have points within applicants' composition ranges and therefore anticipate the claimed compositions. In any event, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the compositional proportions taught by the references overlap the instantly claimed proportions and therefore are considered to establish a prima facie case of obviousness. It would have been prima facie obvious to one of ordinary skill in the art to select any portion of the disclosed ranges including the instantly claimed ranges from the ranges disclosed in the prior art references, *In re Peterson* 65 USPQ2d 1379 (CAFC 2003). Also, *In re Geisler* 43 USPQ2d 1365 (Fed. Cir. 1997); *In re Woodruff*, 16 USPQ2d 1934 (CCPA 1976); *In re Malagari*, 182 USPQ 549, 553 (CCPA 1974) and MPEP 2144.05.

Allowable Subject Matter

24. Claims 3, 5-6 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The allowability of these claims, however, is subject to resolution of the pending provisional double patenting and provisional obviousness type double patenting rejections. The prior art of record does not disclose or make obvious the removal of excess metal in the local geometries as suggested by claims 3 and 5-6. The prior art of record does not disclose or make obvious the co-extrusion of claim 16 incorporating the microstructure limitations of claim 1.

Response to Arguments

25. Applicant's arguments filed December 10, 2004 have been fully considered but they are not persuasive.

26. Applicant's offers a treatise on legal precedent regarding sections 102 and 103, and the "different approach" to each section. It should be noted, however, when applicant claims a composition in terms of a function, property or characteristic and the composition of the prior art is the same as that of the claim but the function is not explicitly disclosed by the reference, the examiner may indeed make a rejection under both 35 U.S.C. 102 and 103, expressed as a 102/103 rejection. "There is nothing inconsistent in concurrent rejections for obviousness under 35 U.S.C. 103 and for anticipation under 35 U.S.C. 102." *In re Best*, 562 F.2d 1252, 1255 n.4, 195 USPQ 430, 433 n.4 (CCPA 1977). This same rationale also applies to product, apparatus, and process claims claimed in terms of function, property or characteristic. Therefore, a 35 U.S.C. 102/103 rejection is appropriate for these types of claims as well as for composition claims. See MPEP 2112, Section III.

27. Regarding the rejection of claims 1-2, 4, 7-15, 17-34 rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Armanie (U.S. Patent 6,113,711), applicant merely states that "Armanie's disclosure of a 'tortuous path' refers to an angled die. This would eliminate fiber texture in an extruded component." Applicant, however, provides no evidence for applicant's position that an angled die would eliminate fiber

Art Unit: 1775

texture in an extruded component. The examiner notes that Armanie discloses an extruded structural member having an extruded profile with a local geometry promoting axisymmetric metal flow and ribs formed between other structural ribs and unrecrystallized microstructure exhibiting fiber texture. According to applicant's disclosure, it appears that such conditions of axisymmetric metal flow are sufficient to increase amounts of fiber texture and promote <100> and <111> fiber components. Patent and Trademark Office can require applicants to prove that prior art products do not necessarily or inherently possess characteristics of claimed products where claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes; burden of proof is on applicants where rejection based on inherency under 35 U.S.C. § 102 or on prima facie obviousness under 35 U.S.C. § 103, jointly or alternatively, and Patent and Trademark Office's inability to manufacture products or to obtain and compare prior art products evidences fairness of this rejection, *In re Best, Bolton, and Shaw*, 195 USPQ 431 (CCPA 1977). See also *In re Fitzgerald*, 619 F.2d 67, 70, 205 USPQ 594, 596 (CCPA 1980). See MPEP 2112, Section V. In the rejection of the claims, the examiner clearly outlined the rationale and technical reasoning for supporting inherency by showing that the article of Armanie discloses a substantially similar process to that described in applicant's disclosure to produce the claimed product. Therefore the burden is on applicant to that applicant's claims distinguish over the prior art. Applicant has not met this burden. Regarding the microstructure recited by applicant's claims, note that failure of those skilled in the art to contemporaneously recognize an inherent property, function or ingredient of a prior art reference does not preclude a finding of anticipation. *Atlas Powder Co. v. IRECO, Inc.*, 190 F.3d 1342, 1349, 51 USPQ2d 1943, 1948 (Fed. Cir. 1999). There is no requirement that a person of

Art Unit: 1775

ordinary skill in the art would have recognized the inherent disclosure at the time of invention, but only that the subject matter would be inherent in the prior art reference. *Schering Corp. v. Geneva Pharm. Inc.*, 339 F.3d 1373, 1377, 67 USPQ2d 1664, 1668 (Fed. Cir. 2003); see also *Toro Co. v. Deere & Co.*, 355 F.3d 1313, 1320, 69 USPQ2d 1584, 1590 (Fed. Cir. 2004)("[T]he fact that a characteristic is a necessary feature or result of a prior-art embodiment (that is itself sufficiently described and enabled) is enough for inherent anticipation, even if that fact was unknown at the time of the prior invention."); *Abbott Labs v. Geneva Pharms., Inc.*, 182 F.3d 1315, 1319, 51 USPQ2d 1307, 1310 (Fed.Cir.1999) .

28. Regarding the rejection of claims 1-2, 15, 17, 19-24, 26, 28, 30, 32-33 under 35 U.S.C. 103(a) as obvious over Sugio (Japanese publication 04-022508) in view of Armanie (U.S. Patent 6,113,711), applicant argues that "Sugio is apparently using a conventional, pre-extrusion homogenization and extrusion shapes that would not produce (or would not be understood to produce) a substantially unrecrystallized microstructure and increased fiber texture in local areas". The examiner notes, however, that Sugio discloses an extruded structural member having a substantially unrecrystallized microstructure and fiber texture (e.g. see Figures 1-2 for the extruded profile with a local geometry of about a 1.0 aspect ratio promoting axisymmetric metal flow) and that according to applicant's disclosure such axisymmetric metal flow promotes <100> and <111> fiber components. Patent and Trademark Office can require applicants to prove that prior art products do not necessarily or inherently possess characteristics of claimed products where claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes; burden of proof is on applicants where

Art Unit: 1775

rejection based on inherency under 35 U.S.C. § 102 or on prima facie obviousness under 35 U.S.C. § 103, jointly or alternatively, and Patent and Trademark Office's inability to manufacture products or to obtain and compare prior art products evidences fairness of this rejection, *In re Best, Bolton, and Shaw*, 195 USPQ 431 (CCPA 1977). There is no requirement that a person of ordinary skill in the art would have recognized the inherent disclosure at the time of invention, but only that the subject matter would be inherent in the prior art reference

29. Regarding the rejection of claims 1-2, 15, 17-18, 20-26, 28, 30, 32-33 under 35 U.S.C. 102(e) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Liu (U.S. Patent 6,325,869 or U.S. Pub. No. 2001/00200501), applicant argues that "nothing in the Liu '869 patent teaches, discloses or suggests the presence or use of local areas of substantially unrecrystallized microstructure" and that Liu has "a substantially unrecrystallized microstructure throughout, not in an area of the structure itself". The examiner notes, however, that Liu discloses an extruded structural member having a substantially unrecrystallized microstructure and fiber texture (e.g. see Figure 4 for unrecrystallized extruded profile with a local geometry promoting axisymmetric metal flow; see column 7, line 24 - column 8, line 21, for discussion on unrecrystallized microstructure; see column 1, lines 25-67) and according to the applicant's disclosure, an axisymmetric metal flow would promote <100> and <111> fiber components. There is no requirement that Liu recognized subject matter would be inherent to Liu's disclosure. It should also be noted that applicant's arguments are not commensurate with the pending claim language since there is no limitation in the rejected base claims that prohibits a

Art Unit: 1775

substantially unrecrystallized microstructure throughout or requires such a microstructure only in localized areas.

30. Regarding the rejection of claims 1-2, 15, 17-18, 20-26, 28, 30, 32-33 under 35 U.S.C. 102(a) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Karabin (U.S. Patent 5,863,359), applicant argues that the products of Karabin would "have a substantially unrecrystallized microstructure throughout, not in local areas of the stringer or plate themselves". Applicant's arguments are not commensurate with the pending claim language since there is no limitation in the rejected base claims that prohibits a substantially unrecrystallized microstructure throughout or requires such a microstructure only in localized areas.

31. Regarding the rejection of claims 1-2, 15, 17, 20-23, 28 and 30 under 35 U.S.C. 102(e) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Takemoto (U.S. Pub. No. 2002/0043640), applicant argues that Takemoto does not teach or suggest "local areas of increased fiber texture" and "does not suggest, teach or describe, *inter alia*, an extruded structural member". The examiner notes that Takemoto does indeed disclose an extruded structural member having a substantially unrecrystallized microstructure and fiber texture (e.g. see paragraph [0042] for discussion on unrecrystallized microstructure; see paragraphs [0028]-[0035] for compositions). The extruded member of Takemoto is further machined (e.g. see paragraph [0038]). According to applicant's disclosure, extruded metal flow would promote <100> and <111> fiber components. The fiber structure of the claims would be present in

Art Unit: 1775

Takemoto in view of the fact that Takemoto follows similar steps, compositions and configurations disclosed by applicant to result in increased amounts of fiber texture. Regarding "local" areas of increased fiber texture, applicant's arguments are not commensurate with the pending claim language since there is no limitation in the rejected base claims that prohibits a substantially unrecrystallized microstructure throughout or requires such a microstructure only in localized areas.

32. Regarding the rejection of claims 1-2, 15, 17, 20-23, 28, 30 and 33 are rejected under 35 U.S.C. 102(e) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Yoshihara (U.S. Pub. No. 2002/0014287), applicant argues that Yoshihara has a square structure with uniform wall thickness and "does not teach, suggest or describe *inter alia* a local area with intentionally increased fiber texture". The examiner notes, however, that Yoshihara discloses an extruded structural member having a substantially unrecrystallized microstructure and the right angles of the extruded shape which would promote asymmetric metal flow and fiber texture. It is not necessary that Yoshihara teach, suggest or describe inherent features.

33. Regarding the rejection of claims 1-2, 15, 17, 20-23, 28, 30 and 33 under 35 U.S.C. 102(e) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kawai (U.S. Pub. No. 2003/0008165), it is not clear where in applicant's response that applicant specifically addressed this rejection.

Art Unit: 1775

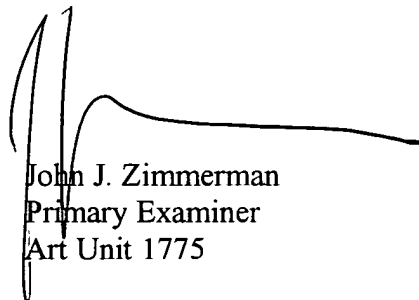
34. Regarding the rejection of claims 1-2, 15, 17, 20-24, 28, 30 and 32-33 under 35 U.S.C. 102(a,b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Yamashita (U.S. Patent 6,231,995) or Yamashita (Japanese publication 11-071624), applicant argues that the ribs "are extensions of the wall and would not promote axisymmetric extrusion". The examiner notes that according to applicant's disclosure, such structures would promote asymmetric metal flow and it is not clear why Yamashita's structures would not have the same resultant microstructure. Applicant has presented no detailed rationale for applicant's statement. Barring evidence to the contrary, it is likely that the fiber structure of the claims would be present in the Yamashita references in view of the fact that these references follows similar steps, compositions and configurations disclosed by applicant to result in increased amounts of fiber texture.

Conclusion

35. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

36. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Zimmerman whose telephone number is (571) 272-1547. The examiner can normally be reached on 8:30am-5:00pm, M-F. Supervisor Deborah Jones can be reached on (571) 272-1535. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

37. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John J. Zimmerman
Primary Examiner
Art Unit 1775

jjz
February 18, 2005